

**Transmission Business Line
Non-Construction Alternatives Round Table Meeting
Meeting Minutes
June 18-19, 2003**

Members present

Ken Canon, Industrial Customers of Northwest Utilities
Ralph Cavanagh, Natural Resources Defense Council
Art Compton, Montana Department of Environmental Quality
Tom Foley, Non-Wires Study consultant
Nancy Hirsh, Northwest Energy Coalition
Robert Kahn, Northwest Independent Power Producers Coalition
Paul Kjellander, Idaho Public Utilities Commission
Steve LaFond, The Boeing Company
Sue McLain, Puget Sound Energy
Kris Mikkelsen, Inland Power & Light Company
Bill Pascoe, Northwestern Energy
Margie Schaff, Affiliated Tribes of Northwest Indians, Economic Development Corporation
John Savage, Oregon Public Utility Commission
Brian Silverstein, Bonneville Power Administration
Vickie VanZandt, Bonneville Power Administration
Carolyn Whitney, vice president of TBL Business Strategy, Public and Tribal Affairs

Members absent:

Hardev Juj, Seattle City Light
Tom Karier, Northwest Power Planning Council, Washington state
Heather Rhoads-Weaver, Northwest Sustainable Energy for Economic Development
Dick Wanderscheid, city of Ashland

Observers and members of the public

Ken Corum, Northwest Power Planning Council
Jeffrey Utter, alternate for Northwest Sustainable Energy for Economic Development

Project staff present:

Mike Weedall, vice president of Energy Efficiency
Terry Oliver, public utilities specialist
Charles Alton, environmental protection specialist
David Le, public utilities specialist
Lawrence Carter, electrical engineer, TBL Network Planning
Mark Jackson, general engineer of Business Strategy Transmission Marketing
Toni Timberman, TBL account executive
Darby Collins, public affairs specialist
Sally Grabowski, communication assistant
Marion Cox, facilitator

Meeting Notes

Wednesday, June 18, 2003

9:05 a.m. The meeting was called to order by Carolyn Whitney and Brian Silverstein. Brian quickly reviewed the project road map that demonstrates how the 2003 Round Table products impact the transmission planning process: screening criteria, detailed studies, alternative measures and pilot programs.

The goal of this meeting was to narrow the list of institutional barriers from 17 to five or six to be resolved in the next 12 to 18 months. A subgroup earlier identified a broad list of barriers that are likely obstacles to successful implementation of non-construction solutions to high voltage transmission. Action Plans will be completed by September to successfully resolve the narrowed list of barriers.

The detailed studies being performed in 2003 serve two purposes: to help refine BPA develop screening criteria be used to determine which congestion problems are candidates for full study; and to help refine the study methodology for future detailed studies.

The 2003-2004 pilot programs will help resolve technical, economic, and market issues to implementation of non-construction alternatives. BPA is currently determining the budget for pilot projects and is looking for other interested parties (like retail utilities, etc.) to partner and help leverage the program.

A copy of the roadmap can be found at the following link:

<http://www2.transmission.bpa.gov/Projects/NonWire/NonWireDocs/Roadmap.pdf>

Detailed Studies – Status

(See PowerPoint presentation NCA Analysis Plan and Findings)

Presentation by Terry Oliver, PBL public utilities specialist

The purpose of detailed studies is to determine whether or not non-construction options will work in a particular situation. The three detailed studies being done in 2003 are key to refining the planning process and training staff.

Currently BPA has hired the e3 consultants (Energy and Environmental Economics, Inc.) to train BPA personnel to do detailed non-construction analysis (10 people trained to date.) We are working in parallel with the consultant on the studies, with BPA gradually picking up more of the load. Currently it's about 50/50 on Olympic Peninsula studies, 30/70 on McNary-Brownlee and 10/90 on Lower Valley.

We are working to complete these studies by the end of September. The Olympic Peninsula analysis will be done in June/July, McNary-Brownlee in July/August and

Lower Valley (Jackson Hole) in August-September. The studies will assess sensitivities to load forecasts, construction cost estimates and the cost of penetration of the mitigation measures.

The Olympic Peninsula currently has a voltage stability problem for double contingencies and will be a problem for single contingencies in about five years. This is a winter peaking area, mostly resistive (heating) load. Possible mitigation includes conservation and distributed generation. Demand response is the least-cost option but is not enough to provide entire solution. Still assessing load control, distributed generation and changes in commercial lighting. BPA is working with Northwest Energy Efficiency Alliance.

Member: How long would mitigation defer a transmission line project?

Silverstein: Our goal is between three to 10 years. Much depends on continued availability and expansion of mitigation measures and we need to keep up with load growth. If we build the line, we don't need anything else for about 20 to 30 years.

Member: Transmission deferral benefits of mitigation measures are not the sole value of a project – need to keep in mind that conservation has an inherent value to society.

Silverstein: The benefit of measures is different when considering consumer, societal and transmission impact. Need to consider them all.

Member: What would the impact of Duke generation at Satsop be?

Silverstein: No benefit on Olympic peninsula

Member: How are we dealing with the low interest rate environment? Seems like this would affect the analysis when comparing a transmission line versus considering alternatives.

Oliver: We are using about a 6 percent interest rate for analysis. BPA needs to borrow for non-wires as well as wires, using the same interest rate for both. Interest rates do sway your view of the world.

Silverstein: This does make a difference because of the size (cost) of a transmission construction project versus a small demand-side project.

Member: When evaluating investments, do you capitalize the demand side or is it a transmission expense? How do you handle lost revenues?

Oliver: We are not charging lost revenues against demand response. Charging lost transmission business to conservation measures would create a bias.

Silverstein: There are ways to avoid this in our accounting. Currently we set lost revenue to zero in our analysis. We calculate like there were no measures, then write a check.

Member: What about voltage reduction at load? There's disagreement between utilities about the value of voltage reduction for the end user during times of system stress. And, what is our sense of the reliability of the demand response and how do you factor in non-compliance?

Oliver: We are running pilots to sort out these issues. There is a very stiff penalty for non-response if they bid in and then don't perform. (*Mark Jackson* added the penalty is 1-1). This can also be a problem -- if the penalty is too stiff, then people are afraid to sign up for program. Or they may be afraid to start on generators that don't run very often.

Member: For demand response, will people plan their processes around this to provide a 10-year benefit or will they lose interest after a short time? Will you try to provide an incentive to keep interest up?

Silverstein: Need to keep this all in perspective. When you look at Kangley-Echo Lake, by building a new transmission line, the system losses go down so savings are actually realized. Some projects pay for themselves in a short time by loss savings alone. Therefore, building a line could be considered a conservation measure.

Oliver: The McNary – Brownlee project Brownlee project in Idaho is inductive load. It is summer peaking and the load comes from irrigation (pump), air conditioning and food processing plants.

The Lower Valley (Jackson Hole/Teton) area load has grown much faster than expected (lots of driveway heaters and air conditioners.) Need to buy more, build or reduce load. Winter and summer problem – voltage collapse in winter and summer thermal. NIMBY is a problem when building transmission. There is some interest in fuel switching (to natural gas heating, etc.) but it is expensive – natural gas is trucked in and dumped in pipeline.

Member: Question about gas field just east of the area – is there a possibility of bringing gas in by pipeline or by rail car?

Oliver: Transmission solution would be to convert some 115-kV to 169-kV. Need to replace structures, so would build to 230-kV capacity and operate at 169. Cross-arms have been salvaged from the Bell-Coulee line, so the only real cost deferral is the higher voltage transformation and switchgear at either end.

Discussion on the Revenue Impact Model (RIM) test

Member: If RIM test is included in the analysis, it will flunk every project. Why is it still part of the analysis? It is basically saying that any measure that reduces revenue to the transmission system is not cost-effective. What is the driver? Is it cost effective to the system or to society? I'm not convinced that setting lost revenue to zero correctly

captures the impact of a project. Also need to assess the revenue impact to the local utility. I recommend we do away with the RIM test.

Silverstein: I suggest that we go back to the consultant to come up with a new financial measure to determine what the transmission customer must pay without determining revenue. We may come up with a new financial measure. We will go back to the consultant and maybe develop analysis that more clearly captures the benefit rather than just setting lost revenue to zero.

By the September meeting we will have two sets of studies done with another in progress.

Whitney: Maybe we should schedule an interim conference call to discuss results as they come out rather than waiting until September.

Member: I want to see the analysis prior to excluding a project because of its potential impact on revenues.

Member: It's important to calculate the rate impact by not setting lost revenue to zero for information purposes, not for eliminating projects.

Whitney: After Terry and his team have done more work on their analysis, maybe we could provide early information to interested parties over the summer.

Member: How will BPA put these results to use? We need to differentiate what is valuable information and what we use to make decisions.

Alternative Measures for Consideration

Presentation by Mike Hoffman, PBL public utility specialist

Major alternative measures under consideration include:

- Demand side management (targeted conservation and residential-end use control)
- Distributed Energy Resources (distributed generation such as the EnergyWeb demonstration project in the Olympic Peninsula pilot project, dispatchable resources such as the Tacoma EnergyWeb)
- Research and development (energy storage, biomass, small renewable monitoring)
- Some of these measures will require a cultural change for the Northwest, since the staff that handles and dispatches transmission and not use to handling alternative measures.

For more information, the full presentation is attached at <http://www2.transmission.bpa.gov/Projects/NonWire/NonWireDocs/PilotsProjects6-18-03.pdf>

Member: Since you are looking at a mix of measures, are you using any of the pilot projects to demonstrate these technologies?

Weedall: We want to try and demonstrate these alternative measures in the pilot projects. But we are only considering what is ready to go today.

VanZandt: Also, as we evaluate projects, we have to recognize that not every megawatt is the same. Some are harder to serve than others. For example, irrigation pumping load and air conditioning load draws more reactive load off the system. We think it makes more sense to get inductive load off the system. Summer load is more dangerous for us than winter load.

Member: So could we look at paying more for summer load reductions since its more valuable? We need to come up with a methodology to figure that out.

Member: We need to get more information on summer versus winter load conditions.

Member: Also, how do you keep a demand exchange alive when prices are low?

Mark Jackson: Status of Olympic Peninsula pilot. Two paper mills -- Daishowa and Port Townsend -- have been visited. They are both interested in participating. I expect to have both contracts finalized by this fall. Then we will test the response even during times it is not needed. TBL schedulers have been trained on this new procedure.

Port Townsend: Steam generation available (1-2 megawatts.) Plant is decrepitated. It is owned by venture capitalists, so longevity of the project is questionable. They need a minimum of \$125/MWh to break even if they participate. This sounds reasonable and I'm willing to go up to about \$200/MWh.

Daishowa: 80-megawatt processor load -- grinders for chips. Lots of storage area, so can grind a bunch and then shut down grinders for a while. Could defer 40 MW for eight to 10 hours. Right now tries to shape load according to local utility needs. They get it right about 25 percent of the time. Having this available could defer building a line by two years.

Other: The energy management systems for all Walmarts are controlled centrally out of Oklahoma. It is may be possible to make a deal with Walmart to curtail load at their stores.

Member: You will need the contractual right to interrupt rather than expect voluntary compliance in order to consider this as a viable alternative to building transmission.

Jackson: Alternative proposal: contract for x hrs/day for no longer than y consecutive days at a certain price so that they are obligated to respond rather than do it on a voluntary basis.

Silverstein: We are exploring the voluntary option to gauge response. We will trigger when we don't really need it so we can see the effect and the response.

Member: Often pilot projects are used to avoid spending real money to solve a problem. I'm not saying that BPA is doing this but are all these pilots going to just be BPA or are

there other entities involved? How much load needs to move in order to let BPA know it is effective?

Jackson: Might need 20 MW on the Olympic Peninsula.

Silverstein: If you calculate about \$175 MWh times at least 30 hours – consecutive days split into different blocks. It might ends up costing \$115,000/year for 22 MW.

Member: Is this a program that can be generalized to other parts of the grid or is this just doable because of the nature of this particular type of load in this area?

Member: There are five or six newsprint plants around – this could work in other areas. It may be worth doing but we have to test how long they are willing to shut down and for how many days. I believe that during critical five degree weather, when we most need them to be off, they will want to run all equipment to keep the stuff from freezing up. We need to talk to managers and determine what their response would be. Camas was hit hard during '89 when it was so cold. Member offered to help BPA talk to others about their likely response in very cold weather.

Jackson: BPA purchased a database of all single loads over half a megawatt and plotted them to show proximity to problem areas. By the time you get below the top 20, the loads are pretty small.

Member: The “pilot” part of this might be “testing” the market response. This is the first program to use market response to solve transmission problems.

Member: It is also important to have dispatchers able to see a response after a request was made.

VanZandt: In the past we have used contractual demand reduction with the DSIs, but that was a while ago. We need to have about five times the amount of load signed up in this program to get the amount we need when we ask for it. We are currently not complying with WSCC or NERC reliability criteria on the Olympic peninsula now. We need to create a safety net to avoid cascading. Normal winter peak load on the Peninsula is about 1,000 megawatts and extra-heavy is about 1,500 megawatts. I would like to have about 1,500 megawatts of load shedding available across the whole system for emergencies. But we currently have only about 1,000 megawatts available through UFLS and UVLS.

Member: Can a market-based program knock down loads reliably in an extreme cold condition? Testing at 30 degrees will not answer this question. What are the questions we are trying to answer through the pilot program? Why is BPA dealing with load directly rather than through the local utility? Would make more sense to partner and maybe get a better response.

Member: The Oregon Trust may have funds available to help with this program.

Member: Would it be useful to list the hypotheses that we want to test with the pilot program? What is it that we don't know that you want to test? Have you identified the big questions that you need to pilot?

Member: Puget is looking at non-wires alternatives but is focusing on conversion to natural gas.

Member: There is no program to date that coordinates transmission non-wires with distribution non-wires – we never have successfully deferred transmission construction.

Whitney: There is a limited pot of money. Would it be better to try lots of different alternatives or one major pilot project rather than splitting budget between three projects? Figure out where we can get the biggest bang for the buck.

Member: Does this mean we then only learn a little bit about a lot of things, consequently results would not be useful on rest of system. We need to go in and defer a line. Need enough to make it worthwhile. Tackle something nobody has done and make it work.

Member: We need to pick a project and hit it hard. I think it is better to focus on the Olympic Peninsula, throw everything at it and prove that you can defer a transmission line. If I wanted to feel good about something, that would be it. Let's put the money in one spot.

VanZandt: A shift from resistive load to inductive load makes it hard to predict how the system will respond long term. We cannot get accurate load forecasts and accurate composition of load – more inductive load on system than we thought, which makes it much more sensitive to disturbances.

Member: Question about fuel switching – at what point does load composition get out of balance?

VanZandt: Like cholesterol – we need more resistive than inductive, but the total is important.

Member: Kangley-Echo Lake deferral was not successful because the benefit was too diverse – it would have had to have three times the load reduction to reduce 1 megawatt on the transmission system and timing was also problem. Are there other pilot projects on the list that have this same diffusion problem?

Silverstein: No, we purposely chose three 'radial' projects where the effect is more 1-1.

Weedall: Oslo, Minn. controls all space and water heat by utility – hits them all lightly. Since the reduction is spread over a wide base the customers don't notice the impact.

Silverstein: Lower Valley is almost all BPA customers. The Olympic Peninsula –

transmission is ours but most of the customers are not BPA's. The mix of customers might make one solution more viable than another. A change in load may be good for one utility but may cause problems for another.

Discussion: Would it be better to do demand reduction in 'tight' homes versus 'loose' homes. Concern that the loose homes are a lower economic base & might not be as able to cope with the reduction in heat. Reducing tight homes would be slower because of better insulation...need longer time to see benefit, but less impact on consumer.

Question about whether annual load forecasts by NT customers to PBL can be used to improve quality of long-term studies:

Member: BPA needs to go out and educate customers about load forecasts and the importance of accuracy. If the forecasts are too high, customer need to understand that it may cost them more due to the fact that transmission must be built to meet those projections.

Discussion of upgrading performance of the transmission grid through digital controls – EPRI "CEIDS" project.

VanZandt: BPA is participating in "self-healing grid." A part of this is looking at closed loop controls that will assess system conditions and apply proper corrective action rather than just tripping huge amounts of generation. This is still in the developmental stage.

Screening criteria must be completed Sept. 30. BPA staff will review the draft at the October Round Table meeting. It would be valuable to have a sub-group assist in developing this the criteria.

Biggest issue right now is the lack of money which limits ability BPA's ability to do demo's on the system.

Member: Would it be possible to use mobile generator to serve peaking load? Move seasonally from winter peak to summer peak areas?

Member: Most mobile generators burn diesel. I would like to see the use of diesel removed as an option to grid support.

A sign up sheet was passed around for members to sign up for the sub-committees.

Institutional Barriers

Presentation by Tom Foley, Non-Wires Study consultant

Brian Silverstein, manager of TBL Network Planning:

Institutional barriers probably represent greatest obstacle to achieving non-construction alternatives. The Round Table was formed to help figure out ways to address these institutional barriers, many of which are bigger than BPA. The Round Table needs a

game plan for figuring out a way to do this along with creating an action plan to specifically address key institutional barriers. We also need to figure out a way to involve other stakeholders.

The institutional issue list is long. We need to narrow it down and focus on those that offer the greatest leverage and the biggest bang for the buck. We want to try and get agreement on the five or so major areas so we can focus on them and work towards results. We also want to create a template for an action plan. And, we'll need volunteers to work these barriers over the summer. We hope to have draft action plans for the October Round Table meeting.

Our ideas was to try and rank barriers by:

- 1 . How big an obstacle this is the institutional issue?
- 2 . Can we lower this barrier/is it something that is doable?

For example, let's look at issue #5 -- utilities over estimating load estimates to BPA. This makes it very difficult for BPA to tell the quality of the forecast. Utilities need to look out to see if loads are going to drop off.

This is a competitive industry—utilities lack sufficient staff to be able to adequately forecast. They can't afford to apply resource to the question. And as the economies of the region change, forecasts need to be adjusted. For example, today's growth is not as steep as past years.

Member: BPA needs to educate customers better about this issue and the ultimate cost to the region and themselves over the long run. There is also uncertainty about GTA rules. Utilities are concerned about what the future looks like so they tend to estimate high, figuring we might as well put it in now.

Member: BPA customer expectations of NT right affect those high estimates.

Member: Before making any big investment, we will need to tighten up the forecasting numbers. Maybe BPA can create its own forecasting ability so it doesn't have to rely on others for those numbers.

Member: If numbers are inflated, then why is the system so constrained?

Foley: The tendency to mask real problems if distorted.

Institutional Barriers Hampering Least-Cost Approach to Transmission Planning (In no particular order)

1. Chinese wall between distribution and power in utilities, including BPA.

Inability to communicate freely between power and distribution and transmission business lines within a utility makes it more difficult to put together a comprehensive plan for serving loads. An RTO would help smooth over this barrier, or perhaps a non-wires group within a utility, but outside of any other established business line, reporting

directly to the CEO.

2. Lost revenues for BPA and distribution utilities (DUs).

Any power saved at the end users facility will raise the rates charged by distribution utilities and transmission business lines, even as total costs are reduced. A mechanism (like decoupling profits from throughput) might have to be created to allow a utility to profit from doing what's right for ratepayers as a whole.

3. Lack of incentives for distribution utilities to do accurate forecasting.

TBL builds transmission based on peak load forecasts of customer utilities, including IOUs, but utilities pay only for what they ultimately use. Distribution utilities have incentive to forecast high, because this gives them a safety net, and more freedom in serving their loads at no cost to them.

4. Distribution utilities position between TBL and end users.

Many of the non-wires solutions contemplated are, or would be, controlled by end users of power. But TBL has no working relationship with these end users. The working relationship is between the distribution utility and the end users. If TBL wants to work with end users to effect non-wires solutions, and the utility does not want to, because of lost revenue, e.g., it may be a showstopper. TBL (or other transmission provider), the end user, and the distribution utility have to be able to work together to determine the overall value of non-wires alternatives, and to implement a strategy to acquire them.

5. Lack of transparency in transmission planning process and how non-wires alternatives can be employed.

Currently transmission planning takes place without a good understanding of what could be done as an alternative to a transmission line. Transmission planners are reactive. If loads are forecast to grow, or if generators want to be hooked up to the grid, transmission is built to accommodate the "needs." As such, transmission folks do not know what opportunities reside on the customer side of the meter, or with generation more strategically placed within the grid or distribution system. Better communication with distribution customers and their customers might make transmission planning more transparent and more receptive to new and innovative ideas.

6. TBL's requirement to provide wires for generators regardless of location.

As above, transmission planning is reactive. If TBL could "suggest" strongly, and perhaps, give monetary incentives to owners of generation to site their plants in a more favorable area within the grid, transmission capital could be saved.

7. Inaccurate peak-load price signals for energy and T&D for most customers.

Most end-use customers pay average power and T&D rates. If they were to see the real price of serving loads at all times, they would undoubtedly adjust consumption to use power when the price of delivered power was low, and use less when it was high. This would have the effect of lowering peak loads (because power and T&D cost are high when the loads are high), and taking capital costs out of the system.

8. Multiple regulatory jurisdictions for both IOU and POU.

TBL sells transmission to public and IOUs. TBL has its rates approved by FERC. IOUs have their rates approved by state regulators, sometimes in multiple states, and publicly owned utilities have their own boards. Working through all of this political structure will be a challenge.

9. Who funds measures? Who implements? Different players from generation to distribution to end use.

Non-wires solution to transmission can take costs out of the delivery system all the way from the generator through to the end users. So, who pays for the measure? Distribution investments may be three times transmission investments. If we save transmission capital, how much distribution capital do we save and where? How should the costs be split? If siting a plant strategically saves transmission but costs the plant owner, who pays? What if it lowers power costs to distribution utilities? Are there incentives that have to be paid to end users to adopt transmission saving measures? Finally, who delivers? This may be something that is decided as we address barriers, above.

10. Some people are uncertain about the reliability and persistence of measures.

Certainty about the reliability and persistence of measures will not come until more people have experience with the measures. Experience with the measures will not be widespread until we resolve some of the barriers. Also, we may need to provide pilot projects to prove out the effectiveness of some of the measures proposed measures.

11. Lack of uniform, simple and fair interconnection standards for distributed generation.

Many utilities in the past have been reluctant to allow distributed generation in their service territories, because they resulted in loss of control and lost revenue. As a result effective barriers were constructed to keep distribution generation from being a key player. Other more legitimate reasons for wanting to keep control over distribution generation were the safety issues related to distribution generation's interface with the rest of the distribution system. Downed lines could be energized by distribution generation systems without the correct instrumentation. FERC has a NOPR on interconnection standards that is in play now.

12. Multiple ownership of contiguous elements of the grid.

It is possible for load reductions to create congestion. For example, if eastern coal is serving a 500 MWe load in Spokane, and that load (or part of that load) goes away, there may be no place for the saved eastern coal-fired power to go, even if it were the least costly resource on the grid.

13. State of flux of industry (e.g. SMD and RTO)

The future in this region looks very different with and without an RTO. But, in the Northwest, it is not at all clear how the future will unfold relative to an RTO. One approach would be to stay with the current system. Another is to adopt FERC's standard market design (SMD) features under an regional transmission organization (RTO). A third might be to take what is good for this region out of SMD, and have a regional

approach that is somewhere in between the SMD and today's practice, and recognizes the realities imposed on the system by the hydropower system.

15. Sponsors of targeted baseload energy efficiency measures potentially capable of delivering grid

Conservation measures have been installed in this region in volume since the 1980s. But, very seldom where they ever credited for the reduced congestion and increased reliability benefits that accompanied their installation. Under FERC's SMD they would get credit if certified. As the Round Table proceeds, we need to figure out the benefits that accrue to conservation measures of various types, and to enable entrepreneurs to reap those benefits through their programs. Congestion and reliability benefits cannot capture any of the associated economic value.

16. Nationwide, a crisis of confidence throughout the financial community is suppressing capital investment in grid, generation and demand-side assets.

In part, because of uncertainty over the future structure of the electric utility, many people have been reluctant to invest in the industry. During the crisis 2000-2001, many plants were started and many more were planned, but after the bottom fell out of the market, it has been difficult to attract capital to this industry. Current high natural gas prices are not helping. As for T&D, uncertainty about the structure of the industry and the resulting technologies that may or may be spurred by it, create even more uncertainty. For example, if technologies develop that can manage peak easily and with little cost to end users, the need for new transmission may be obviated.

17. Inability of PF utilities to resell BPA power.

If distribution utilities or their customers could sell power that they saved, it would provide an incentive to adopt the kinds of non-wires solutions we are looking for. But, PF customers are prohibited from doing so, even though, I think, they can sell unused transmission. Customers of IOUs who do have access to the wholesale markets are similarly prohibited from selling saved power. Thus, the savings in both cases (other than foregone costs) would accrue to others.

Thursday, June 19, 2003

The meeting was called to order at 8:05 a.m.

General discussion on the institutional barriers and priority ranking of the barriers.
Member comments include:

Member: There is increased emphasis on generation siting and permit requirements in the future, especially pertaining to carbon dioxide mitigation, noise and greenhouse issues.

Member: The Western Governor's Association has put together a siting process for four Northwestern states, outlining how transmission siting will be done across the West.

Member: There is also a siting protocol that the Department of Energy signed for BPA.

Member: BPA took an action item to gather information on transmission siting and forward to board members.

Member: The system is brittle right now. And what are we doing to address this.

Member: A centralized distribution system is keeping us from taking a real responsibility for how we live our lives. The public perception about where the power comes from is a barrier.

Member: We need more than just a buy-in from the utility community to be successful. We need to change perceptions – need lots of education. This will probably take a long time. The public needs to understand that it starts with them and how they use energy.

Member: I don't sense hostility about a centralized grid. This group symbolically stands for things that enhance the centralized grid and keep costs low.

BPA staffer: There is a lack of understanding on how decisions are made and how they cascade down. Many people don't understand how it all fits together. People need to understand how they can plug in and make a difference.

Member: What we are doing is finding solutions that will enhance and improve the system. They don't have to be big things. They should also involve things that people can participate in such as energy efficiency programs, renewables and demand reductions.

Vickie VanZandt had a short discussion on several operation issues and incidents where the system was overloaded. There have been an unusual number of incidents for this early in the season. The Round Table members encouraged BPA to get this information out to the public (that it was a significant news story.) They mentioned approaching *Clearing Up* with the information.

Member: Brief discussion on cost control issues with BPA. One member mentioned that BPA's customers are skeptical about BPA's spending on both power and transmission. Customers are not building or undertaking any major projects due to cost constraints. Many of BPA's smaller customers are skeptical of the extent of some of BPA's programs. There's a need for BPA to provide clear and factual information about its needs so that people understand them and understand that the agency is being driven by the needs of the region, not the desires of the agency.

Member: We need to bring the rest of the region along on what we're doing with the Round Table.

Whitney: We might consider having a boarder, public meeting in October to introduce and review some of the products coming out of the Round Table.

Prioritization of Institutional Barriers

(Please note: numbers refer back to list of 17 barriers listed on previous pages)

The Round Table members voted to prioritize the institutional barriers, as follows:

<u>Issue #</u>	<u>Votes</u>
# 2. Lost revenues for BPA and distribution utilities	6
# 3. Lack of incentives for distribution utilities to do accurate forecasting	7
# 5. Lack of transparency in transmission planning process and how non-wires can be deployed	12
# 6. TBL's requirements to provide wires for generators	2
# 7. Inaccurate peak-load price signals for energy and T&D customers	5
#10. Uncertainty about reliability	7
#11. Lack of uniform, simple and fair interconnection standards	2
#15. Captures of economic value for efficiency measures*	5
# 9. Who pays, who implements*	17

* These last two items were grouped into one issue.

Round Table's Top Six Institutional Barriers

- #15/9. Who pays, who implements and how to capture economic value for efficiency measures
- # 5. Lack of transparency in transmission planning process and how non-wires can be deployed
- # 3. Lack of incentives for distribution utilities to do accurate forecasting
- #10. Uncertainty about reliability
- # 2. Lost revenues for BPA and distribution utilities
- # 7. Inaccurate peak-load price signals for energy and T&D customers

Discussion on next steps

Member: This set of barriers could be refined into a white paper. We also may need a statement integrating these barriers. The white paper could then lead to an overall action plan.

Member: We need to show how these barriers flow together. For the Round Table, do these six items follow a natural order?

Member: It would be useful to produce a white paper, and then determine what to do with it.

Member: If we set up a regional conference in the fall, we could discuss where we are in the transmission planning process. That would give us a chance to hear from more

people on this subject.

Carolyn Whitney took away an action item to develop a plan for the fall meeting.

Action Items

Paper on cost of service to inductive loads versus resistive loads.

Responsible: Vickie VanZandt and Brian Silverstein

Further work on screening criteria – work with a subgroup.

Responsible: Bill Pascoe and Tom Foley

Designing 2004 pilots

Responsible: Nancy Hirsh, Margie Schaff, Ralph Cavanagh, John Savage

Can we develop a new alternative to the RIM test? What is the NCA going to use to test for determining whether to go forward with the pilots?

Review of detailed studies over summer.

Ken Canon to provide Mark Jackson with names and contact numbers for use in the Olympic Peninsula pilot project.

Gather information on transmission and resource siting from the Western Governor's Association

Responsible: John Savage, Brian Silverstein

White paper from the Round Table (identifying problems and key challenges to addressing these problems.

Change date of September meeting to third week in September

Responsible: Sally Grabowski

Member: Between now and September, will you let us know the budget and timelines for the pilots?

Mike Weedall: We are currently looking at actuals for these projects and have not yet allocated funds. However, we're considering allocating about \$4 million (from both TBL and PBL) over the next three years. We need to figure out how that breaks out between the two business units and how it will be allocated to specific projects.